

ABSTRACT OF THE DISCLOSURE

An illumination apparatus for illuminating a surface to be illuminated with radiation comprises a radiation source for generating a beam of radiation having
5 a predetermined wavelength, a wavefront division type optical integrator including a plurality of unit optical systems, a condenser optical system for guiding the beams of radiation from the wavefront division type optical integrator to the surface to be illuminated, and a
10 plurality of auxiliary optical members (OMA) for deflecting the beams of radiation through the unit optical systems. At least one of the auxiliary optical members is disposed corresponding to one of the unit optical systems.